

Abstract of the Disclosure

Fluid heat-exposed food can be uniformly heated with high energy efficiency. A current-carrying/heating apparatus is applied to use fluid meat and drink, such as soup or the like, as the heat-exposed food and to heat it by resistance heat. A primary winding is wound about an iron core and is connected to an AC power supply. A heat pipe is further wound about the iron core. A communication hole, into which the meat and drink used as the heat-exposed food is supplied, is formed in the heat pipe. An electric closed loop circuit is constituted by the heat-exposed food supplied into the communication hole. When a current is carried to the primary winding, a magnetic flux is generated around the iron core by the current. A current, induced by an operation of electromagnetic induction of the magnetic flux, flows to the heat-exposed food, and the heat-exposed food generates heat by the induced current and is heated.